

What is claimed is:

1. An adjustable apparatus for supporting a long span specimen in a flexure test by a load application device, said apparatus comprising:

an upper structure including an elongated beam, at least one support bracket adjustably mountable along a longitudinal span thereof, and a saddle pivotally mounted in said at least one upper support bracket, said saddle engageable in support of the specimen and said upper structure engageable with the load application device opposite said saddle; and

a lower structure spaced apart from said upper structure, said lower support structure including a support beam, at least one spacing member adjustably mounted along a longitudinal span thereof, a lower support bracket adjustably mounted along a longitudinal span of said spacing member, and a saddle pivotally mounted in said lower support bracket to face said upper support structure and engageable with the specimen.

2. The apparatus according to claim 1 wherein said elongated beam of said upper structure is an I-shape.

3. The apparatus according to claim 2 wherein said upper structure includes a plurality of spaced and paired apertures formed as pairs in at least one end plate bordering an inner plate of said I-shape such that one aperture in each pair is on an opposite side of said inner plate.

4. The apparatus according to claim 3 wherein said upper support bracket includes a plurality of spaced and paired apertures at a base portion of said upper mounting bracket, said apertures of said upper mounting bracket alignable with said apertures of said end plate and;

said upper mounting bracket further including a receiving slot formed on opposing side walls of said bracket for supporting said saddle.

5. The apparatus according to claim 4 wherein said saddle includes a pin protruding from opposite sides of said saddle, each pin pivotal in a corresponding receiving slot of said side walls.

6. The apparatus according to claim 5 further comprising a securing plate mountable on each side wall of said upper mounting bracket, said securing plate securing said pins within said receiving slots.

7. The apparatus according to claim 1 wherein said elongated beam of said lower structure is an I-shape.

8. The apparatus according to claim 7 wherein said lower structure includes a plurality of spaced and paired apertures formed as pairs in at least one end plate bordering an inner plate of said I-shape of said lower structure such that one aperture in each pair is on an opposite side of said inner plate.

9. The apparatus according to claim 8 wherein said lower support bracket further comprises a slider as a base portion center mounted at a distal end of a leg portion, and a pair of side walls projecting from opposite sides of said base portion, each side wall of said slider including a receiving slot formed therein for supporting said saddle of said lower structure.

10. The apparatus according to claim 9 wherein said saddle of said lower structure includes a pin protruding from opposite sides of said saddle, each pin pivotable in a corresponding receiving slot of said side walls.

11. The apparatus according to claim 10 wherein said lower structure further includes a spacer member normal to said longitudinal span of said lower structure and including a first portion of said spacer adjustably secured to the

apertured surface of said lower structure and a second portion opposite the first portion adjustably supporting said leg of said slider.

12. The apparatus according to claim 11 further comprising a plate mechanism mechanically attachable to said spacer and interposing extending protrusions of said leg portion therebetween.

13. The apparatus according to claim 11 wherein said lower support bracket is slidably adjustable relative to said spacer and said spacer is slidably adjustable relative to said lower structure.

14. The apparatus according to claim 12 wherein said lower support bracket is slidably adjustable relative to said spacer and said spacer is slidably adjustable relative to said lower structure.

15. The apparatus according to claim 12 wherein said plate mechanism includes a spacer plate superposed by a fixing plate, said spacer plate being mounted directly on the opposite surface of said spacer.

16. The apparatus according to claim 1 further comprising bearings inserted between said saddle and said upper support bracket for reducing rotational friction therebetween.

17. The apparatus according to claim 1 further comprising bearings inserted between said saddle and said lower support bracket for reducing rotational friction therebetween.

18. An adjustable apparatus for supporting a long span specimen in a flexure test by a load application device, said apparatus comprising:

an upper structure including an elongated beam, at least one support bracket adjustably mountable along a longitudinal span thereof, and a saddle pivotally mounted in said at least one upper support bracket, said saddle engageable in support of the specimen and said upper structure engageable with the load application device opposite said saddle; and

a lower structure spaced apart from said upper structure, said lower support structure including a support beam, at least one spacing member adjustably mounted along a longitudinal span thereof, a lower support bracket adjustably mounted along a longitudinal span of said spacing member, and a saddle pivotally mounted in said lower support bracket to face said upper support structure and engageable with the specimen;

said upper structure including a plurality of spaced and paired apertures formed as pairs in at least one end plate bordering an inner plate of said I-shape of said upper structure such that one aperture in each pair is on an opposite side of the inner plate;

    said upper support bracket further comprises a slider as a base portion center mounted at a distal end of a leg portion, and a pair of side walls projecting from opposite sides of said base portion, each side wall of said slider including a receiving slot formed therein for supporting said saddle of said upper structure.

19. An adjustable apparatus for supporting a long span specimen in a flexure test by a load application device, said apparatus comprising:

    upper longitudinal support means for adjustably supporting at least one bracket along a longitudinal span thereof, and a saddle pivotally mounted in said at least one upper support bracket, said saddle engageable in support of the specimen and said upper structure engageable with the load application device opposite said saddle; and

lower longitudinal support means for supporting at least a lower support bracket, said lower longitudinal support means spaced apart from said upper longitudinal support means and including a beam, at least one spacing member adjustably mounted along a longitudinal span thereof, said at least one lower support bracket adjustably mounted along a longitudinal span of said spacing member, and a saddle pivotally mounted in each said at least one lower support bracket to face said upper support means and engageable with the specimen.